

REPLACEMENT SHEET

Imp-FAM18	LARLFSLKPLVLALGFCFGTHCAAADAVAAEETDNPTAGGSVRSVSEPIQPTSLSLGSTC	60
NMB0280	LARLFSLKPLVLALGFCFGTHCAAADAVAAEETDNPTAGGSVRSVSEPIQPTSLSLGSTC	60
NMA2207	MARLFSLKPLVLALGFCFGTHCAAADAVAAEETDNPTAGGSVRSVSEPIQPTSLSLGSTC	60
	:*****:*****	
Imp-FAM18	LFCSNESGSPERTEAAVRGSGEASIPEDYTRIVADKVEGQSQVQVRAEGNVVVERNRTTL	120
NMB0280	LFCSNESGSPERTEAAVRGSGEASIPEDYTRIVADKVEGQSQVQVRAEGNVVVERNRTTL	120
NMA2207	LFCSNESGSPERTEAAVRGSGEASIPEDYTRIVADKVEGQSQVQVRAEGNVVVERNRTTL	120
	*****:*****:*****	
Imp-FAM18	NTDWADYDQSGDTVTAGDRFALQQDGTILIRGETLTYNLEQQTGEAHNVRMETEHGGRRLQ	180
NMB0280	NTDWADYDQSGDTVTAGDRFALQQDGTILIRGETLTYNLEQQTGEAHNVRMETEHGGRRLQ	180
NMA2207	NADWADYDQSGDTVTAGDRFALQQDGTILIRGETLTYNLEQQTGEAHNVRMETEHGGRRLQ	180
	*:*****	
Imp-FAM18	SVSRTAEMLGEGHYKLTETQFNTCSAGDAGWYVKAASVEADREKIGVAKHAAFFVGGVP	240
NMB0280	SVSRTAEMLGEGHYKLTETQFNTCSAGDAGWYVKAASVEADREKIGVAKHAAFFVGGVP	240
NMA2207	SVSRTAEMLGEGHYKLTETQFNTCSAGDAGWYVKAASVEADREKIGVAKHAAFFVGGVP	240

Imp-FAM18	IFYTPWADFPLDGNRKSGLLVPSLSAGSDGVSLSPYFYNLAPNLDAFAPSIVIGERGAV	300
NMB0280	IFYTPWADFPLDGNRKSGLLVPSLSAGSDGVSLSPYFYNLAPNLDAFAPSIVIGERGAV	300
NMA2207	IFYTPWADFPLDGNRKSGLLVPSLSAGSDGVSLSPYFYNLAPNLDAFAPSIVIGERGAV	300

Imp-FAM18	FDGQVRYLRPDYAGQSDLTWLPDHDKSGRNNRYQAKWQHRHDISDTLQAGVDFNQVSDSG	360
NMB0280	FDGQVRYLRPDYAGQSDLTWLPDHDKSGRNNRYQAKWQHRHDISDTLQAGVDFNQVSDSG	360
NMA2207	FDGQVRYLRPDYAGQSDLTWLPDHDKSGRNNRYQAKWQHRHDISDTLQAGVDFNQVSDSG	360

Imp-FAM18	YYRDFYGNKEIAGNVNLRVWLDYGGRAAGGSLNAGLSVLKYQTLANQSGYKDKPYALM	420
NMB0280	YYRDFYGNKEIAGNVNLRVWLDYGGRAAGGSLNAGLSVLKYQTLANQSGYKDKPYALM	420
NMA2207	YYRDFYGNKEIAGNVNLRVWLDYGGRAAGGSLNAGLSVLKYQTLANQSGYKDKPYALM	420

Imp-FAM18	PRLSADWRKNTGRAQIGVSAQFTRFSDHSDRQDGSRLVVYPDIKWDFSNWGYVRPKLGLH	480
NMB0280	PRLSADWRKNTGRAQIGVSAQFTRFSDHSDRQDGSRLVVYPDIKWDFSNWGYVRPKLGLH	480
NMA2207	PRLSADWRKNTGRAQIGVSAQFTRFSDHSDRQDGSRLVVYPDIKWDFSNWGYVRPKLGLH	480
	:**	
Imp-FAM18	ATYYSLNRFSGQEARRVSRTPIVNIDSGATFERNTRMFSGGVLQTLPLRFYNYIPAKS	540
NMB0280	ATYYSLNRFSGQEARRVSRTPIVNIDSGATFERNTRMFSGGVLQTLPLRFYNYIPAKS	540
NMA2207	ATYYSLNRFSGQEARRVSRTPIVNIDSGATFERNTRMFSGGVLQTLPLRFYNYIPAKS	540

Imp-FAM18	QNDLPNFDSESSFGYGQLFRENLYYGNDRINTANSLSAAVQSRILDGATGEERFRAGIG	600
NMB0280	QNDLPNFDSESSFGYGQLFRENLYYGNDRINTANSLSAAVQSRILDGATGEERFRAGIG	600
NMA2207	QNDLPNFDSESSFGYGQLFRENLYYGNDRINTANSLSAAVQSRILDGATGEERFRAGIG	600

Imp-FAM18	QKFYFKDDAVMLDGSVGKKPRNRSDWVAFASGSGSRFILDSSIHYNQNDKRAENYAVGA	660
NMB0280	QKFYFKDDAVMLDGSVGKKPRNRSDWVAFASGSGSRFILDSSIHYNQNDKRAENYAVGA	660
NMA2207	QKFYFKDDAVMLDGSVGKKPRNRSDWVAFASGSGSRFILDSSIHYNQNDKRAENYAVGA	660
	*****:*****:*****	
Imp-FAM18	SYRPAQGKVLNARYKYGRNEKIYLSKSDGSYFYDKLSQLDLAQWPLTRNL SAVVRYNYGF	720
NMB0280	SYRPAQGKVLNARYKYGRNEKIYLSKSDGSYFYDKLSQLDLAQWPLTRNL SAVVRYNYGF	720
NMA2207	SYRPAQGKVLNARYKYGRNEKIYLSKSDGSYFYDKLSQLDLAQWPLTRNL SAVVRYNYGF	720

Imp-FAM18	EAKKPIEVLAGA EYKSSCGCWAGVYAQRVVTGENTYKNAVFVSLQLKDLSSVGRNPADR	780
NMB0280	EAKKPIEVLAGA EYKSSCGCWAGVYAQRVVTGENTYKNAVFVSLQLKDLSSVGRNPADR	780
NMA2207	EAKKPIEVLAGA EYKSSCGCWAGVYAQRVVTGENTYKNAVFVSLQLKDLSSVGRNPADR	780
	*****:*****	
Imp-FAM18	MDVAVPGYI PAHSL SAGR NKR P	802 (SEQ ID NO: 27)
NMB0280	MDVAVPGYI PAHSL SAGR NKR P	802 (SEQ ID NO: 28)
NMA2207	MDVAVPGYI PAHSL SAGR NKR P	802 (SEQ ID NO: 29)

Figure 8

REPLACEMENT SHEET

A (SEQ ID NO: 2)

MIEKLTFGFLFKEDARSEFMRLMAYVRPYKIRIVAALIAIFGVAATESYLAAFIAPLINHG
FSAPAAPPELSAAAAGIISTLQNWREQFTYMVWGTEENKIWTVPLFLIILVVIRGICRFTST
YLMTWVSVMTISKIRKDMFAKMLTLSSRYHQETPSGTVLNMNMLNTEQSVSNASDIFTVL
TRDTMIVTGLTIVLLYLNLWQLSLIVVLMFPLLSLLSRYRDRDLKHVISDSQKSIGTMNNV
IAETHQGHVRVVKLFNGQAQAANRFDVNRTIVRLSKKITQATAAHSFSELIASIALAVV
IFIALWQSQNGYTTIGEFMAFIVAMLMYAPIKSLANISIPMQTMFLAADGVCAFLDTPP
EQDKGTLAPQVRVEGRISFRNVDVEYRSDGIKALDNFNLDIRQGERVALVGRSGSGKSTVV
NLLPRFVEPSAGNICIDGIDIADIKLDCRAQFALVSQDVFLFDDTLFENVRYSRPDAGE
AEVLFALQATANLQSLIDSSPLGLHQPIGSGNSNLGGQRQRAIARAILKDAPILLLDEA
TSALDNESERLVQQALERLMENRTGIIVAHRLTTIEGADRIIVMDDGKIIIEQGTHEQLMS
QNGYYTMLRNISNKDAAVRTA

B (SEQ ID NO: 4)

MLAWRPGRPDGCQAAGGRRYNPGHDCIKASVSLNSAARNAPAGSQPVKAELWKRVSRYSGSYWKGLVLA
VLLMAGAAATQ
PTLAVIMKPLDDGFGSAGKPHYVWFLPLAVVGLILLRGICNFFSDYLLAWVANNVLRGIRGEMFERLLG
LPDADFKRQDT
GRLLNRFTIDAGNVTGYATDVITVLVRETLVVIALIGVLLYMSWALTLIILVMLPVSVGIARAFTRRRLR
RINRETVNMNA
ELTRVVSEGIDGQRVIKLFDGYDAERRRFDVNSRLRRFAMRSATADAALPLTQVCISVAVGAVIAVA
LSQANSALT
GSFASFMAALAIQIFDPIKRLTNLAGKMQLVAAESVFTLVDTQPEADAGTRALPEPVRGKVEFRAVSH
RFPDADRDTVS
AVSFLVEPGQTVALVGRSGSGKTTLVNMLPRFVLPDGGDILFDDVPIQDLTLRSLRSHLSLVSQDVVLF
DDTIAANVGYG
AGGTVDARVDRDALAAANLLEFVDGLPLGIHTPVGQNAARLSGGQRQLAIARALIKNAPVLIILDEATS
ALDNESERQVQ
ASLERLMRGRTTLVIAHRLSTVQNADRIIVLDAGKIVEHGPHSELLAANGLYASLYNMQFRED

Figure 14

REPLACEMENT SHEET

(SEQ ID NO: 3)

atgatagaaaaactgacttttcggactgtttaaaaaagaagacgcgcgcagctttatgccc
ctgatggcgtacgtccgccccctacaaaatccgcacgttgccgccctgattgccattttc
ggcgttgccgcaccgaaagctaccttgccgccttcacgcgcccttgattaccacggc
ttttccgcacctgcccgcgcgcgcgagctgtctgcccgcgcgcgcacatttccaccctg
caaaactggcgcggaacagtttacctatatggtttgggggacggaaaaacaaatctggacc
gtcccgcctcttccctcatcatcctcgtcgtcatccgtggcatctgcgcgtttaccagcacc
tatctgatgacttgggtctccgtgatgaccatcagcaaaatccgcaaagatatgtttgcc
aaaatgctgaccctttcctcccgtaccatcaggaaacgccgtccggcaccgtactgatg
aatatgctcaacctgaccgaacagtcggtcagcaacgccagcgacatcttcaccgtcctc
acgcgcgacacgatgatcgttacccggcctgaccatcgtcctgctttacctcaactggcag
ctcagcctcatcgtcgtcctgatgttccccctgctctcctgctctcgcgctactaccgc
gaccgtctgaaacacgtcattttccgactcgcaaaaaagcataggcacgatgaacaacgtg
attgccgaaaacccatcagggacaccgcgtcgtcgaagctgttcaacgggcaggcgaggcg
gcaaacccggttgacgcggtcaaccgcaccatcgtccgcctcagcaaaaaaatcacgcag
gcaacggcggcacattccccgttcagcgaactgatcgcctcgatcgccctcgcgctcgtc
atcttcacgcgcctgtggcaagccaaaacggctacaccaccatcggcgaatttatggca
ttcatcgtcgcgatgctgcaaatgtacgcccccatcaaaagccttgccaacatcagcatc
cctatgcagacgatgttcctcgcgcgcgcgaggtgtatgtgcatttctcgacacccccgcc
gaacaggacaagggcacgctcgcaccgcagcgtgtcgaagggcgcatcagcttccgcaac
gtcgatgtcgaataccgttcagacggcatcaaagccctcgacaacttcaacctcgacatc
agacaaggcgaaacgcgtcgccttggtcggacgttccggcagcggcaaatccaccgtcgtc
aacctgctgccccgctttgtcgaaccgtctgcgcggcaacatctgcatagacggtatcgac
atcgccgacatcaaaactcgactgcctgcgcgcccattcgccctcgtotccaagacgta
ttcctgtttgacgacaccctgtttgaaaacgtccgatacagccgtcccgcgcggggcgaa
gccgaagtccgttccgcccctcaaaccgccaacctgcaaagcctgattgacagctccccg
ctcggactgcaccagcccacgtcgatcgaaacggcagcaacttatccggcgagacgcggcaa
cgctcgcatttgcccgcgccattttgaaagacgcgcgcgatattattattggacgaagcc
accagcgcattagacaacgaatccgaacgcctcgtccaacaggcgctcgaacgcctgatg
gaaaaccgcaccggcatcatcgtcgcaccgcctgaccaccatcgaagggggcgaccgc
atcatcgtgatggacgacggcaaaatcatcgaacaaggcacacacgaacaactgatgtcc
caaaacggttactacacgatgttacgcaatatctcaaaacaaagatgocgcgcgtccggacg
gcataa

Figure 15 A

REPLACEMENT SHEET

(SEQ ID NO: 5)

atgctggcgtggcgccgggtcgccggacgggtgtcaggcggcggggtggccgacgggtacaatcccggg
cacgattgtat
taaagcgagtggtttccttgaattctgccgcacgcaatgcgcccgccggctcccagccgggtcaaggccga
actctggaagc
gggtctacagccgcgtaggctcttactggaaggggctgggtgctggccgtcctgctgatggccggcgccg
ccgcgacccag
cccacgctggcagtcacatgaagccgctgctcgacgatggcttctcgggcgccaagccgcattatgtc
tggttcctgcc
gctggcggtgggtggggctgatcctgctgcgcggaatctgcaatttcttcagcgactacctgctggcctg
ggtggccaaca
acgtgctgcgcggcatccggggcgagatgttcgagcggctgctgggcctgccgatgccgacttcaagc
gcggcgacacc
ggccgcctgctcaaccgcttcaccatcgacgcgggcaacgtcacccggctacgccaccgacgtcatcacg
gtgctgggtgcg
cgaaacctggtcgtcatcgccctgatcggcgtgctgctgtacatgtcgtgggcgtgacgctgatcat
cctcgtcatgc
tgccggtgctgggtgggcatcgcccgcccttcacgcgcggctgcgcgcgatcaaccgcgaaaccgtca
acatgaacgcc
gagtcaccgcgctgggtcagcgagggcatcgacgggcagcgtgtcatcaagctgttcgacggctatgac
gccgagcgccg
ccgttcgacttcgtcaactcgccctgcgcgcttcgcgatgcgcagcgccaccgccgacgcggcgct
cacgccgtca
cgcaggtgtgcatctcggtcgccgtgggcgcgggtcatcgccgtggccctcagccaggccaacagcgggc
cgctcaccgtc
ggcagcttcgcctcgttcatggccgcgctgggcgagatcttcgatccgatcaagcgcctgaccaacctg
gccggcaaat
gcagaaatgctggtggccgcccgaagcgtgttcaccctggtggaccagacgcccaggccgacgcgg
cacgcgcct
tgcccgaaccggtgcgcggcaaggtcgaattcgtgcggtcagccatcgcttcccggacgcggatcgcg
ataccgtcagc
gccgtgtcgttcctggtcgagccgggccagaccgtggccctggtcggacgctcgggcagcggaagacc
actctggtcaa
catgctgcgcgctttgtcctgcccgatggggcgacatcctgttcgacgatgtgccatccaggatct
caccttgcca
gctgcgctcgcatctgtcgtggtcagccaggacgtggtgctgttcgacgacaccattgccgccaacg
tgggttatggc
gccggcgccacgctcgacgacgcgcgcttcgcgacgcgctggccgcggccaacctgctggagttcgtc
gacggcttgcc
gctgggcatccacacgccggtgggcccagaatgccgcccgcctgtcgggcggccagcgccagcgccctggc
gatcgcccgcg
ccctgatcaagaacgcgcgggtcctgatcctcgacgaggcgacctcggcgctggacaacgaatccgagc
gccaggtgcag
gcacgctggagcggtgatgcgcgggcgcaaccacgtggtcatcgccaccggctgtccaccgtgcag
aacgccgaccg
catcatcgtgctggacgcggcaagatcgtcgagcacgggcccgcacagcgagctgttgccgccaacgg
cctgtacgcct
cgctctacaacatgcagttccgcgaggactga

Figure 15 B